

UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE OF CORRECTION

Page 1 of 1

PATENT NO. : 7,223,871  
APPLICATION NO.: 10/537,177  
ISSUE DATE : May 29, 2007  
INVENTOR(S) : Paivi JUUJARVI, Seppo PARHI and Jaana KARJALAINEN

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

IN THE CLAIMS:

Claim 4, Col. 8, line 43, change "40° C." to -- 40° C --.

Claim 12, Col. 10, line 17, change "--CH<sub>2</sub>--R is" to  
-- --CH<sub>2</sub>--, R is --.

MAILING ADDRESS OF SENDER (Please do not use customer number below):

James C. Lydon  
100 Daingerfield Road, Suite 100  
Alexandria, VA 22314

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

*If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.*

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re U.S. Patent No. 7,223,871

Inventors: Paivi JUUJARVI et al.

Serial No.: 10/537,177

Issued: May 29, 2007

For: PROCESS FOR PREPARING SUBSTITUTED IMIDAZOLE DERIVATIVES  
AND INTERMEDIATES USED IN THE PROCESS

**REQUEST FOR EXPEDITED ISSUANCE OF CERTIFICATE OF CORRECTION  
PURSUANT TO 37 C.F.R. § 1.322 AND MPEP § 1480.01**

ATTN: Certificate of Correction Branch  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

February 15, 2008

Sir:

The patentees request a Certificate of Correction to correct two errors noted in the printed patent. A Form PTO-1050 listing each error is attached.

Each listed error is a Patent Office mistake, as demonstrated by the attached documentation:

Claim 4: A copy of the last Amendment, filed January 25, 2007, showing the correct language of patent claim 4 (application claim 4).

Claim 12: A copy of the January 25, 2007 Amendment, showing the correct language of patent claim 12 (application claim 12).

Expedited grant of an appropriate Certificate of Correction is requested pursuant to M.P.E.P. § 1480.01.

U.S. Patent No. 7,223,871  
REQUEST FOR CERTIFICATE OF CORRECTION

**PATENT**

It is not believed any fee is required for issuance of a Certificate of Correction. Nevertheless, the Patent Office is authorized to charge any required fee to our Deposit Account No. 50-1258.

Respectfully submitted,

/James C. Lydon/

James C. Lydon  
Reg. No. 30,082

Atty. Case No.: TUR-169  
100 Daingerfield Road  
Suite 100  
Alexandria, Virginia 22314  
Telephone: (703) 838-0445  
Facsimile: (703) 838-0447

Attachments:

Form PTO-1050  
Amendment filed January 25, 2007 (Copy)

RECEIVED  
CENTRAL FAX CENTER

JAN 25 2007

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of:

päivi JUUJÄRVI et al.

Serial Number: 10/537,177

Group Art Unit: 1626

Filed: June 1, 2005

Examiner: Cheng, Karen

For: PROCESS FOR PREPARING SUBSTITUTED IMIDAZOLE DERIVATIVES  
AND INTERMEDIATES USED IN THE PROCESS

AMENDMENT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

January 25, 2007

Sir:

In response to the Official Action mailed October 25, 2006,  
please amend this application as follows:

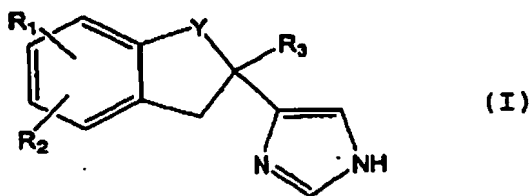
Appln. S.N. 10/537,177  
AMENDMENT

PATENT

IN THE CLAIMS:

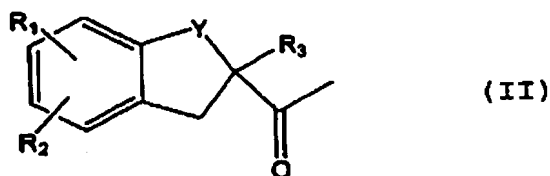
Please amend claims 1, 8 and 11, as shown below in the detailed listing of all claims which are, or were, in this application:

1. (Currently amended) A process for preparing substituted ~~imidazole derivatives~~ compounds of formula (I) and acid addition salts thereof

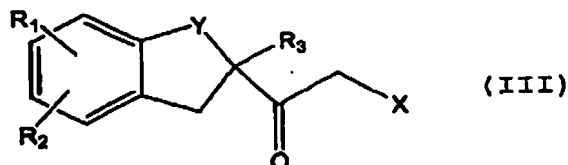


in which formula Y is  $-CH_2-$  or  $-CO-$ ,  $R_1$  is H, halogen or hydroxy,  $R_2$  is H or halogen and  $R_3$  is H or lower alkyl, comprising the steps of

- a) halogenating a compound of formula (II)



wherein Y,  $R_1$ ,  $R_2$  and  $R_3$  are as defined above, to obtain a compound of formula (III)

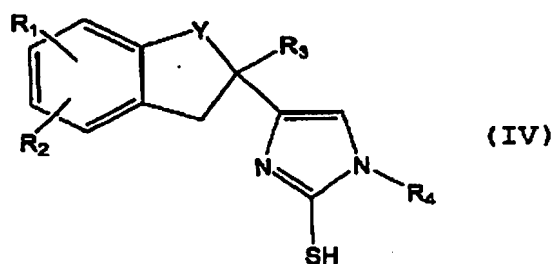


Appln. S.N. 10/537,177  
AMENDMENT

PATENT

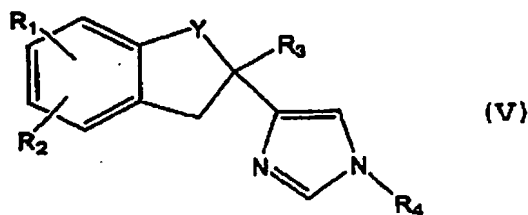
wherein Y, R<sub>1</sub>, R<sub>2</sub> and R<sub>3</sub> are as defined above and X is halogen,

b) reacting the compound of formula (III) thus obtained with an amine of formula R<sub>4</sub>NH<sub>2</sub>, wherein R<sub>4</sub> is an ~~easily removable leaving~~ aralkyl group, and an alkali metal thiocyanate, to obtain a compound of formula (IV)



wherein Y, R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> are as defined above,

c) removing the mercapto group from the compound of formula (IV) to obtain a compound of formula (V)



wherein Y, R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> are as defined above,

d) removing the group R<sub>4</sub> from the compound of formula (V) to obtain a compound of formula (I), and, if desired,

Appln. S.N. 10/537,177  
AMENDMENT

PATENT

e) converting the resulting compound of formula (I) into an acid addition salt thereof.

2. (Original) A process according to claim 1 wherein step a) is carried by reacting a compound of formula (II) with Br<sub>2</sub> in methanol at a temperature of -8 to +25 °C.

3. (Previously presented) A process according to claim 1 wherein step b) is carried out by reacting a compound of formula (III) with benzylamine and potassium thiocyanate.

4. (Previously presented) A process according to claim 1 wherein step c) is carried out in the presence of Raney-Nickel at a temperature of 40 °C to 90 °C.

5. (Previously presented) A process according to claim 1 wherein step d) is carried out by using ammonium formate in the presence of Pd/C.

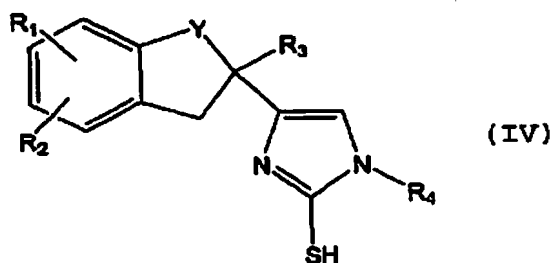
6. (Previously presented) A process according to claim 1 wherein step d) is carried out by hydrogenation in the presence of Pd/C.

Appln. S.N. 10/537,177  
AMENDMENT

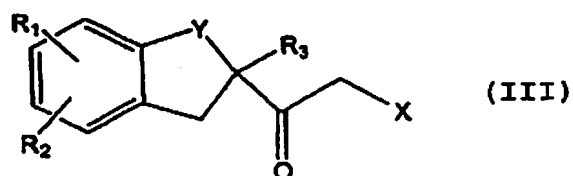
PATENT

7. (Previously presented) A process according to claim 1 wherein Y is  $-\text{CH}_2-$ ,  $\text{R}_1$  is F,  $\text{R}_2$  is H and  $\text{R}_3$  is ethyl.

8. (Currently amended) A process for preparing a compound of formula (IV)



wherein Y is  $-\text{CH}_2-$  or  $-\text{CO}-$ ,  $\text{R}_1$  is H, halogen or hydroxy,  $\text{R}_2$  is H or halogen and  $\text{R}_3$  is H or lower alkyl, comprising reacting a compound of formula (III)



wherein Y,  $\text{R}_1$ ,  $\text{R}_2$  and  $\text{R}_3$  are as defined above and X is halogen, with an amine of formula  $\text{R}_4\text{NH}_2$ , wherein  $\text{R}_4$  is an ~~easily removable leaving~~ aralkyl group, and an alkali metal thiocyanate.



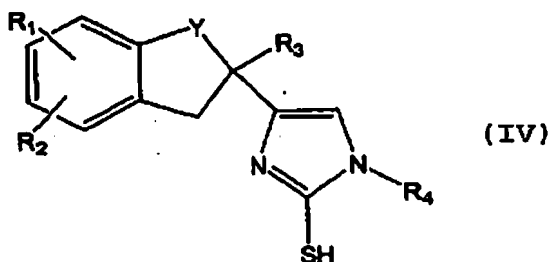
Appln. S.N. 10/537,177  
AMENDMENT

PATENT

9. (Original) A process according to claim 8 comprising reacting a compound of formula (III) with benzylamine and potassium thiocyanate.

10. (Previously presented) A process according to claim 8 wherein Y is  $-\text{CH}_2-$ ,  $\text{R}_1$  is F,  $\text{R}_2$  is H and  $\text{R}_3$  is ethyl.

11. (Currently amended) A compound of formula (IV)



wherein Y is  $-\text{CH}_2-$  or  $-\text{CO}-$ ,  $\text{R}_1$  is halogen or hydroxy,  $\text{R}_2$  is H or halogen,  $\text{R}_3$  is H or lower alkyl and  $\text{R}_4$  is an ~~easily removable~~ leaving aralkyl group.

12. (Original) A compound according to claim 11 wherein Y is  $-\text{CH}_2-$ ,  $\text{R}_1$  is F,  $\text{R}_2$  is H,  $\text{R}_3$  is ethyl and  $\text{R}_4$  is benzyl.

Appln. S.N. 10/537,177  
AMENDMENT

PATENT

REMARKS

This Amendment amends claims 1, 8 and 11. Page 5, lines 8-9 support the definition of R<sub>4</sub> as --aralkyl--. Claims 1-12 are pending.

Examiner Cheng is thanked for acknowledging the Applicants' Finnish priority claim. However, an English translation of the priority document is not required unless one of the three situations listed in 37 C.F.R. § 1.55(a)(4)(i) are present. None of those situations are present in this application.

This Amendment overcomes the 35 U.S.C. § 112, first paragraph, rejection of claims 1-12. Claims 1, 8 and 11 have been amended by defining R<sub>4</sub> as --aralkyl--. The specification enables one of ordinary skill to practice the claimed process, and make and use the claimed compound, without undue experimentation, particularly in view of page 4, lines 20-26 and the illustrative use of benzylamine in the Examples. Reconsideration and withdrawal of the non-enablement rejection of claims 1-12 are earnestly requested.

This Amendment overcomes the 35 U.S.C. § 112, first paragraph, rejection of claims 1-7 for failure to comply with the written description requirement. The preamble of claim 1 has been amended in accordance with the Examiner's helpful suggestion.

Appln. S.N. 10/537,177  
AMENDMENT

PATENT

Reconsideration and withdrawal of the written description rejection of claims 1-7 are earnestly requested.

This Amendment overcomes the 35 U.S.C. § 112, second paragraph, rejection of claims 1-12. As discussed above, claims 1, 8 and 11 now define R, as --aralkyl--, which is itself defined at page 4, lines 20-26 of the specification. One of ordinary skill in the art would readily understand the metes and bounds of the claimed process and compound. Reconsideration and withdrawal of the indefiniteness rejection of claims 1-12 are earnestly requested.

This Amendment overcomes the 35 U.S.C. § 112, second paragraph, rejection of claims 1-7. The preamble of claim 1 has been amended in accordance with the Examiner's helpful suggestion. Reconsideration and withdrawal of the indefiniteness rejection of claims 1-7 are earnestly requested.

This Amendment overcomes the objection to claim 1, which has been amended in accordance with the Examiner's helpful suggestion. Reconsideration and withdrawal of the objection to claim 1 are earnestly requested.

The objection to the specification is respectfully traversed. The format set forth in 37 C.F.R. § 1.77(b) is merely preferred,

Appln. S.N. 10/537,177  
AMENDMENT

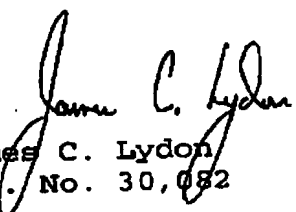
PATENT

and not mandatory. Reconsideration and withdrawal of the objection to the specification are earnestly requested.

It is believed this application is in condition for allowance. Reconsideration and withdrawal of all rejections of claims 1-12, and issuance of a Notice of Allowance directed to those claims, are earnestly requested. The Examiner is urged to telephone the undersigned should she believe any further action is required for allowance.

It is not believed any fee is required for entry and consideration of this Amendment. Nevertheless, the Commissioner is authorized to charge our Deposit Account No. 50-1258 in the amount of any such required fee.

Respectfully submitted,

  
James C. Lydon  
Reg. No. 30,082

Atty. Case No.: TUR-169  
100 Daingerfield Road  
Suite 100  
Alexandria, Virginia 22314  
Telephone: (703) 838-0445  
Facsimile: (703) 838-0447